AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of disintegrating biofilm~~, flocculent bulked sludge or bulked biologically active sludge~~ in an aqueous system, which comprises adding to or forming in an aqueous medium of the aqueous system containing the biofilm~~, flocculent bulked sludge or bulked biologically active sludge~~ a chlorinated hydantoin comprising a monochlorodialkylhydantoin, dichlorodialkylhydantoin or a mixture thereof in an amount sufficient to disintegrate the biofilm and remove the biofilm from surfaces in said aqueous system, ~~flocculent bulked sludge or bulked biologically active sludge,~~ wherein the alkyl group of the chlorinated hydantoin contains from 1 to 6 carbon atoms ~~and a concentration of the chlorinated hydantoin disintegrates the biofilm, flocculent bulked sludge, or bulked biologically active sludge but the same concentration of bromochlorodimethylhydantion (BCDMH) does not disintegrate the biofilm, flocculent bulked sludge, or bulked biologically active sludge under the same conditions~~.

2. (Canceled)

3. (Previously Presented) The method of claim 1, wherein the chlorinated hydantoin is monochlorodimethylhydantoin, dichlorodimethylhydantoin, or a mixture thereof.

4. (Original) The method of claim 1, wherein the chlorinated hydantoin is added to the aqueous medium as a solution or an aqueous slurry.

5. (Original) The method of claim 1, wherein the chlorinated hydantoin is added to the aqueous medium as a solid.

6. (Original) The method of claim 1, wherein the treated aqueous medium is exposed to sunlight.

7. (Original) The method of claim 1, wherein the chlorinated hydantoin is formed in situ by adding to the aqueous medium chlorine from a chlorine source and an alkylated hydantoin in a molar ratio of chlorine to alkylated hydantoin of from 1:100 to 100:1.

8. (Currently Amended) The method of claim 7, wherein the molar ratio of chlorine to alkylated hydantoin ~~of~~ is from 1:10 to 10:1.

9. (Original) The method of claim 1, wherein the aqueous medium contains biofilm adhering to a substrate.

10. (Original) The method of claim 1, wherein the chlorinated hydantoins are added with performance additives.

11. (Original) The method of claim 10, wherein the performance additives are dispersants, biodispersants, scale control agents, corrosion inhibitors, surfactants, biocides, cleaning agents, and mixtures thereof.

12. (Original) The method of claim 1, wherein the aqueous system is a cooling water system, a pulping or papermaking system, an air washer system, an agricultural potable and drainage system, a food preparation or cleaning system, an oil industry system, a potable water system, a household water-related system, or an institutional water-related system.

13. (Currently Amended) A method of removing biofilm from a substrate in an aqueous medium which comprises: adding to or forming in said aqueous medium monochlorodimethylhydantoin, dichlorodimethylhydantoin, or a mixture thereof in an amount sufficient to remove the biofilm from the substrate in the aqueous medium~~, wherein a concentration of the chlorinated hydantoin disintegrates the biofilm but the same concentration of bromochlorodimethylhydantion (BCDMH) does not disintegrate the biofilm under the same conditions~~.

14. (Original) The method of claim 13, wherein the chlorinated dimethylhydantoin is formed in situ by adding to the aqueous medium chlorine from a chlorine source and dimethylhydantoin in a molar ratio of chlorine to dimethylhydantoin of from 1:10 to 10:1.

15. (Original) The method of claim 14, wherein the chlorine source is sodium hypochlorite or gaseous chlorine.

16.-18 (Cancelled)

19. (Previously Presented) The method of claim 1, wherein the chlorinated hydantoins are in an amount sufficient to form a concentration of at least about 20 ppm (expressed as Cl_2) of the chlorinated hydantoins in the aqueous medium.

20. (Previously Presented) The method of claim 19, wherein the chlorinated hydantoins are in an amount sufficient to form a concentration of from about 20 ppm to about 100 ppm (expressed as Cl_2) of the chlorinated hydantoins in the aqueous medium.

21. (Currently Amended) The method of claim 1, wherein the chlorinated hydantoin is dichloro-5,5-dimethylhydantoin (DCDMH), monochloro-5,5-dimethylhydantoin (MCDMH), dichloro-5-methyl-5-ethylhydantoin (DCMEH), monochloro-5-methyl-5-ethylhydantoin (MCMEH), or a mixture thereof.

22. (Previously Presented) The method of claim 1, wherein the aqueous system is a system subject to the growth of biofilms.